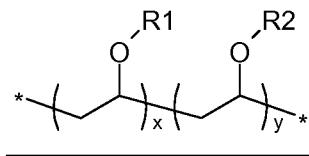


AMENDMENTS TO THE CLAIMS

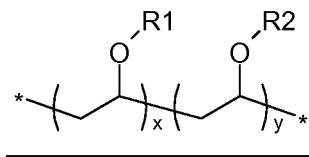
In the claims, please amend claim 19 as follows:

- 1-18. (canceled)
19. (currently amended) A method for delivering a polynucleotide to the cytoplasm of a cell comprising:
a) forming a first amine-containing amphiphilic polyvinylether polymer having the formula:



wherein R1 contains an amine group and R2 is a hydrophobic group;

- b) forming a second amine-containing amphiphilic polyvinylether polymer capable of causing liposome leakage having the formula:



wherein R1 contains an amine group and R2 is a hydrophobic group;

- c) reversibly modifying the second amine-containing amphiphilic polyvinylether polymer via covalent linkage of a plurality of disubstituted maleic anhydride to amines on the polymer thereby forming a reversibly inhibited membrane active polymer, wherein:
i) the reversibly inhibited membrane active polymer is not capable of causing liposome leakage, and
ii) exposure of the reversibly inhibited membrane active polymer to acidic pH results in cleavage of the disubstituted maleic anhydride from the second amine-containing amphiphilic polyvinylether polymer; and,
d) associating said polynucleotide with the first amine-containing amphiphilic polyvinylether polymer to form a binary complex;
e) associating said binary complex with the reversibly inhibited membrane active polymer to form a ternary complex; and
f) contacting the cell with the ternary complex resulting in delivery of the polynucleotide to the cell.

20-21. (canceled)

22. (previously presented) The method of claim 19 wherein said first amine-containing amphiphilic polyvinylether polymer is crosslinked to said reversibly inhibited membrane active polymer via a pH-labile bond.
23. (previously presented) The method of claim 19 wherein said amine-containing amphiphilic polyvinylether polymers disrupt an endocytic membrane of the cell thereby providing delivery of said polynucleotide the cytoplasm of said cell.

24-26. (canceled)

27. (previously presented) The method of claim 19 wherein said disubstituted maleic anhydrides are selected from the group consisting of: carboxydimethylmaleic anhydride, carboxydimethylmaleic anhydride-thioester, and carboxydimethylmaleic anhydride-polyethylene glycol.
28. (previously presented) The method of claim 27 wherein said disubstituted maleic anhydrides are cleaved from said second amine-containing amphiphilic polyvinylether polymer in an endosome.
29. (previously presented) The method of claim 19 wherein said amine-containing amphiphilic polyvinylether polymers each have a molecular weight greater than 10,000 Daltons.
30. (previously presented) The method of claim 22 wherein said ternary complex consists of a nanoparticle.
31. (previously presented) The method of claim 30 wherein said nanoparticle consists of a salt stable nanoparticle.
32. (previously presented) The method of claim 31 wherein said ternary complex has a net negative charge.